# IEEE Newsletter

PUBLICATION OF THE NORTH JERSEY SECTION OF THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

NJ Section PACE, GOLD, WIE:

## **Engineers Meet:**

## **Interview Communication Skills**

On Wednesday, January 9, 2008, the North Jersey Section of Professional Activities Committee, Graduates of the Last Decade and Women in Engineering will host a meeting to discuss "Interview Communication Skills." Our guest speaker will be Amy M. Duncan, PHR of Tetra Tech, Inc.

## **About the Meeting**

Where do you begin when you decide to look for a new position? Amy will discuss the job search, networking, dressing for a successful interview, interviewing success - the do's and don't's of the interview, common interview questions, what do you do after the interview, and finally getting the job offer and accepting the new position.

## **About the Speaker**

Amy M. Duncan, PHR is a Human Resources professional with Tetra Tech, EC, Inc. She has many years of business and Human Resources experience.

Amy holds a BS in Marketing and Management from Centenary College and an MBA in Human Resources from Fairleigh Dickinson. She also holds the Professional Human Resources Certification.

#### All Welcome!

This talk is free to attend, you do not have to be an IEEE member, invite your friends.

**Time:** 6:30 PM to 8:30 PM, Wednesday, January 9, 2008. Free pizza and soda will be served.

Place: Clifton Memorial Library, 292 Piaget Ave, Clifton, NJ, (973) 772-5500. Information: Paul Ward, (973) 790-1625, PWard1130 "AT" aol.com, Richard F. Tax, (201) 664-6954, rftax "AT" verizon.net.

## North Jersey Section Seeks Committee Chairs and Volunteers

The North Section is seeking new volunteers to help conduct business for the benefit of its membership. There are a variety of volunteer positions open and available. They range from technical to non-technical, leadership or just participatory. For Society Chapter Chairs, you MUST be a member of the corresponding IEEE Society.

If you would like to become involved with volunteering in some of these efforts or positions or just become more informed about what is happening at the North Jersey Section, please contact Dr. Chandra Gupta at c.gupta "AT" ieee.org. You are welcome to attend the Section business meeting held the first Wednesday of every month to find out more and other volunteer activities that require some help.

Some committees needing volunteers include the following. Please contact the person indicated for additional information.

- Engineering In Medicine and Biology Chapter Chair - contact c.gupta below.
- GOLD (Graduates of the Last Decade)
   Affinity Group Volunteers and
   Committee members needed contact
   northjerseygold "AT" ieee.org
- WIE (Women in Engineering) Affinity Group Volunteers and Committee members needed - contact kduncan "AT" ieee.org

Additionally, if interested volunteers would like to get more general information about the Section, including a complete listing of all chapters and committees, visit the North Jersey Section website http://web.njit.edu/~ieeenj/, or contact Dr. Chandra Gupta c.gupta "AT" ieee.org.

## Newly Elected IEEE Fellows

The North Jersey Section IEEE congratulates the following member who was elected to the Fellow grade:

## Dr. Ronald Brachman

"for leadership in knowledge representation and reasoning in computer science and artificial intelligence."

## January 2008 Volume 54, Number 6

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### **NEWSLETTER STAFF**

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**Deadline for receipt of material** is the 1st of the month preceding the month of publication. All communications concerning editorial and business matters, including advertising, should be sent to the Business Manager via e-mail at *k.saracinello "AT" ieee.org* or to *The IEEE Newsletter, c/o Keith Saracinello, 25 Messenger Ln, Ringoes, NJ 08551,* (302) 683-7162.

## **IEEE NJ SECTION HOME PAGE**

http://web.njit.edu/~ieeenj/ IEEE NJ SECTION NEWSLETTER HOME PAGE http://web.njit.edu/~ieeenj/NEWSLETTER.html

#### **REPORT ADDRESS CHANGES TO:**

IEEE Service Center, 445 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855-1331, (732) 981-0060. It is not necessary to inform the North Jersey Section when you change your mailing address. "The IEEE Newsletter" and other section mailings use a list provided by IEEE's national headquarters.

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The North Jersey Section Executive Committee usually meets the first Wednesday (except holidays and December) of each month at 7:00 PM. Meetings are open to all members. For information on meeting agenda contact Secretary Russell Pepe at (201) 960-6796, rpepe "AT" att.net.

# **IEEE Mentoring Connection Program: Mentors Needed**

The IEEE Mentoring Connection is looking for "online" mentors to help guide younger IEEE professionals in career planning and professional development. Currently, 989 mentees, but only 440 mentors have registered to participate. Mentor participation is open to all IEEE members above the grade of Student Member. Shortly, we will be inviting Graduate Student Members to join the These members program. graduated with their first professional degree and are presently in a graduate program (Masters, MBA, PhD, etc.). We will need additional mentors in the program to handle the requests from this new group. We need you! Presently our mentors represent positions in academia including Associate Dean and Professor. Industry positions represented by Director of Engineering, Senior Sales Engineer, Project Manager, Corporate Owner, Consultant, R&D Technical Manager, Licensing Manager, Division Manager - Control Systems, Electrical Engineer, Vice President Director Research. Customer Operations, Computer Scientist - Branch Chief, Senior Product Development Engineer, Design Engineer - Power and Retired.

If you have received an invitation to join the program and been thinking about it, now is the time to join. If you have already signed in as a mentor – thank you for participating. Gary Hinkle, a mentor in the program, says "Helping young engineers develop in their careers is very rewarding. Working with some of these individuals has proven to be quite a challenge, because of the diversity among those seeking mentors. I'm glad to be contributing to this program."

The program enables the mentee to select their mentoring partner online from a list of individuals who have volunteered to serve as mentors. After mentors are identified as a potential match, they are contacted and asked to begin establishing a relationship.

can Interested members visit http://www.ieee.org/mentoring for information on the and roles responsibilities of each mentoring partner, including additional program information and an FAQ page. Potential mentors are asked to review the time and effort commitment to the program necessary to ensure а successful mentoring partnership. To enter the program website. please go http://www.mentoringconnection.com and use the IEEE Group ID "IEEE2006" to enter for the first time. Once in, you will need to set your own User ID and Password.

If you have any questions, please contact Cathy Downer, Regional Activities, at c.downer@ieee.org.

## IEEE Foundation Announces 2008 Application Deadlines

The IEEE Foundation, Incorporated, the philanthropic arm of the IEEE, is committed to improving the technological literacy of society from childhood through adulthood. One way the IEEE Foundation seeks to achieve this goal is by awarding grants to new and innovative projects. During 2008, unsolicited applications will be accepted in three cycles from IEEE units and other organizations working in areas of relevance and importance to the IEEE and its membership. Projects should achieve one or more of the following objectives:

- Improve primary and secondary science, technology, and math learning
- Encourage pre-university students to consider engineering as a career path
- Increase the public's understanding of the role of engineers and technology in society
- Preserve the history of IEEE associated technologies
- Tap the technological expertise of IEEE members
- · Demonstrate ability to be replicated

Application deadlines:

Deadline	IEEE Foundation	
	Meeting Date	
4 Jan 2008	Mar 2008	
18 Apr 2008	Jun 2008	
5 Sep 2008	Nov 2008	

Before submitting the online application, please review "How to Apply for a Grant" (http://www.ieee.org/organizations/foundation/grants.html). All applications will be considered for funding by both the IEEE Foundation Board of Directors and the IEEE Life Members Committee. Questions should be directed to the IEEE Foundation Administrator at (732) 981-3435 or foundation-office@ieee.org.

Karen Galuchie

IEEE Development & Grants Officer 445 Hoes Lane, PO Box 1331 Piscataway, NJ 08855-1331

Fax: (732) 981-9515 Email: k.galuchie@ieee.org

Voice: (732) 562-3860

## IEEE North Jersey Section Activities January 2008

- **Jan. 2** "NJ Section Meeting", 6:30 PM, "Executive Committee Meeting" 7:00 PM, ITT, 77 River Rd, Clifton, NJ. Russell Pepe at rpepe "AT" att.net.
- **Jan. 9** "Engineers Meet: Interview Communication Skills" by Amy Duncan NJ PACE, GOLD, WIE, 6:30 8:30 PM, Clifton Memorial Library, 292 Piaget Ave, Clifton, NJ. Paul Ward, (973) 790-1625, PWard1130 "AT" aol.com, Richard F. Tax, (201) 664-6954, rftax "AT" verizon.net.
- **Jan. 31** "Develop More Products Without More Resources", NJ Consultants' Network, 7:30 PM, Aeroflex/KDI-Integrated Products, 60 S. Jefferson Rd, Whippany, NJ. Robert Walker (973) 728-0344 or www.TechnologyOnTap.org.
- **Jan. 31** "How Light Emerges from an Illuminated Array of Sub-Wavelength Apertures" by Dr. Girsh Blumberg, NJ LEOS Chapter, 5:00 PM, New Jersey Institute of Technology (NJIT), Room 202, ECE Center, Newark, NJ. Professor H. Grebel, (973) 596-3538, grebel "AT" njit.edu.
- **Jan. 31** "A Small-Gain Methodology for Robust Nonlinear Control" by Dr. Z.P. Jiang, NJ SMC Chapter, 7:00 PM, New Jersey Institute of Technology (NJIT), Weston Lecture Hall #1 (Intersection between Warren & Summit Streets), Newark, NJ. Dr. Mike Liechenstein, (973) 471-0721, (m.liechenstein "AT" ieee.org) or mengchu.zhou "AT" njit.edu.

## **Upcoming Meetings**

- **Feb. 6** "NJ Section Meeting", 6:30 PM, "Executive Committee Meeting" 7:00 PM, ITT, 77 River Rd, Clifton, NJ. Russell Pepe at rpepe "AT" att.net.
- **Feb. 20** "Automated Design of Microfluidics-Based Biochips: Connecting Biochemistry to Electronics CAD" by Professor Krishnendu Chakrabarty, NJ EDS/C&S Chapters, 7:00 PM, New Jersey Institute of Technology (NJIT), Room 202, ECE Center, Newark, NJ. Dr. Richard Snyder (973) 492-1207 (RS Microwave), Dr. Edip Niver (973) 596-3542 (NJIT), or Dr. Durga Misra (973) 596-5739 (dmisra "AT" njit.edu).
- Feb. 22 "Power Monitoring Solutions Seminar", NJ PES/IAS, 9:00 AM to 2:00 PM, Facility in North Jersey to be determined. Ronald W. Quade, PE, (732) 205-2614 or rwquade "AT" ieee.org.
- Mar. 14-May 9 "Project Management" by Dr. Donald Hsu, North Jersey Section, Tuesday Evenings, 8 sessions, 6:30-9:00 PM, NJ International Bulk Mail Center, 80 County Rd, Jersey City, NJ. Donald Hsu (yanyou "AT" hotmail.com).

# Members and Non-Members Welcome PLEASE POST

NJ Consultants' Network:

## **Develop More Products Without More**

## Resources

On Thursday, January 31, 2008, the IEEE Consultants' Network of Northern NJ is pleased to present "Develop More Products Without More Resources", by Donald A. Borcherding.

### **About the Talk**

Development teams are challenged to develop more products, in shorter timeframes with the same or fewer resources. As we all know, this is a difficult challenge and, if not properly addressed, will create a fast paced, dynamic and often chaotic and frustrating environment.

A new solution is emerging which looks at how well the organization's approach stacks up against the challenges of their development environment and introduces a new term called Product Focus.

Product Focus is the idea that organizations tend to exhibit a consistent behavior when planning and executing projects and as you would expect, organizations are most effective when their Product Focus matches their Development Environment.

All attendees will have an opportunity to complete a survey to identify your organization's Product Focus. An overview on how to interpret your Product Focus will be provided along with methods and practices to shift and change your focus to better match the environment.

Recently compiled industry results will be used to characterize different size companies and identify which companies are most likely to use consultants and contractors.

#### **About the Speaker**

Donald A. Borcherding has a BSEE from the University of Missouri at Rolla and over 20 years experience in new product development. He has successfully optimized Systems, Software, Electrical and Mechanical Engineering performance in the Medical Device, Semiconductor, Defense, Marine and Broadcast Video industries in both small and medium size organizations.

Don founded NexSumnit, LLC to help organizations reduce development cost and improve time to market. His primary focus has been to understand an organization's Product Focus versus their Development Environment to make improvements that provide the greatest benefit.

#### **About the Consultants' Network**

Founded in 1992, the IEEE Consultants Network of Northern NJ encourages and promotes the use of independent technical consultants by business and industry.

### All Welcome!

Everyone welcome. No registration needed. Free admission.

**Time:** 7:30 PM, Thursday, January 31, 2008.

**Place:** Aeroflex/KDI-Integrated Products, 60 S. Jefferson Rd, Whippany, NJ. (Entrance at rear of building).

Information: For directions and up-to-date meeting status, call Robert Walker (973) 728-0344 or visit our website at www.TechnologyOnTap.org. To download a map to KDI, go to: http://www.mcekdi-integrated.com/directions.htm.

## NJ EDS/C&S Chapters:

## Automated Design of Microfluidics-Based Biochips: Connecting Biochemistry to Electronics CAD

On February 20, 2008, the IEEE NJ Section Electron Devices, Circuits and Systems Chapters together with the New Jersey Institute of Technology will host a talk on "Automated Design of Microfluidics-Based Biochips: Connecting Biochemistry to Electronics CAD." The speaker will be Professor Krishnendu Chakrabarty.

### About the Talk

Microfluidic biochips are revolutionizing laboratory procedures for high-throughput DNA sequencing, protein crystallization, drug discovery, immunoassays, etc. As these biochips mature into multifunctional devices with reconfiguration capabilities, automated design and ease of use become extremely important. There is a need to deliver the same level of computer-aided design (CAD) support that the semiconductor industry now takes for granted. These CAD tools will allow designers and users to harness the new technology that is rapidly emerging for integrated biofluidics.

This talk will present ongoing work on techniques for microfluidic biochips. First, the speaker will provide an overview of electrowetting-based digital microfluidics. Next, the speaker will describe synthesis tools that can map behavioral descriptions to a droplet-based microfluidic device and generate an optimized schedule of bioassay operations, the binding of assay operations to functional units, as well as the layout and droplet flow-paths for the biochip. Techniques for pin-constrained chip design, fault detection, and dynamic reconfiguration will also be presented. An automated design flow allows the biochip user to concentrate on the development of nano- and micro-scale bioassays, leaving implementation details to design automation tools.

## About the Speaker

Krishnendu Chakrabarty received the B. Tech. degree from the Indian Institute of Technology, Kharagpur, in 1990, and the MSE and PhD degrees from the University of Michigan, Ann Arbor, in 1992 and 1995, respectively. He is now Professor of Electrical and Computer Engineering at Duke University. Prof. Chakrabarty is a recipient of the National Science Foundation Early Faculty (CAREER) award, the Office of Naval Research Young Investigator award, the Humboldt Research Fellowship from the Alexander von Humboldt Foundation, Germany, and several best papers awards at IEEE conferences. His current research projects include: testing and design-for-testability of system-on-chip integrated circuits; digital microfluidics, circuits and systems based on DNA selfassembly, and wireless sensor networks. He has authored seven books on these topics, published over 250 papers in journals and refereed conference proceedings, and given over 100 invited, keynote, and plenary talks.

Professor Chakrabarty is a Fellow of IEEE (Class of 2008), a Distinguished Visitor of the IEEE Computer Society for 2005-2007, and a Distinguished Lecturer of the IEEE Circuits and Systems Society for 2006-2007. He is an Associate Editor of IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, IEEE Transactions on VLSI Systems, IEEE Transactions on Circuits and System I, IEEE Transactions on Biomedical Circuits and Systems, and the ACM Journal on Emerging Technologies in Computing Systems. He also serves as an Editor of IEEE Design & Test of Computers and of the Journal of Electronic Testing: Theory Applications (JETTA).

## All Welcome!

You do not have to be a member of the IEEE to attend.

**Time:** 7:00 PM, Tuesday, February 20, 2008. Free buffet will be starting at 6:15 PM.

**Place:** New Jersey Institute of Technology (NJIT), Room 202, ECE Center, Newark, NJ. Directions are available at http://www.njit.edu.

**Information:** Dr. Richard Snyder (973) 492-1207 (RS Microwave), Dr. Edip Niver (973) 596-3542 (NJIT), or Dr. Durga Misra (973) 596-5739 (dmisra "AT" njit.edu).

NJ SMC Society:

## A Small-Gain Methodology for Robust Nonlinear Control

On Thursday, January 31, 2008, the NJ Systems, Man & Cybernetics (SMC) Chapter will be hosting a seminar at NJIT on the topic noted above. Dr. Z.P. Jiang, a professor at the Polytechnic University in Brooklyn, New York, will be the presenter.

### **About the Talk**

Small-gain theorems are one of the fundamental tools for the analysis and control of complex interconnected dynamical systems. In this talk, a nonlinear small-gain theorem and its Lyapunov version will be presented for general nonlinear interconnected systems. Firstly, it is shown how these nonlinear small-gain theorems generalize the classical small-gain theorems, and are powerful tools for testing global stability properties in complex interconnected systems. Secondly, a new control method based on the nonlinear small-gain theorems and techniques will be presented for unifying earlier solutions to the robust nonlinear control problem. If time permits, some recent work on the extension of the nonlinear small-gain theorem for general large-scale complex systems will be briefly described.

### **About the Speaker**

Z.P. Jiang received the BSc degree in mathematics from the University of Wuhan, Wuhan, China, in 1988, the MSc degree in statistics from the Université de Paris-sud, France, in 1989, and the PhD degree in automatic control and mathematics from the École des Mines de Paris, France, in 1993. From 1993 to 1998. he held visiting researcher positions with various institutions including INRIA (Sophia-Antipolis), the Australian France, National University, the University of Sydney, and University of California. In January 1999, he joined the Polytechnic University at Brooklyn, New York, where he is currently a Professor. His main research interests include stability theory, the theory of robust and adaptive nonlinear control, and their applications to under-actuated mechanical systems, congestion control, wireless networks, multi-agent systems and cognitive science. For more details please visit eeweb.poly.edu/faculty/jiang. Dr. Jiang has served as a Subject Editor for the International Journal of Robust and Nonlinear Control, and as an Associate Editor for Systems & Control Letters, IEEE Transactions on Automatic Control and European Journal of Control. Dr. Jiang is a recipient of the prestigious Queen Elizabeth II Fellowship Award from the Australian Research Council, the CAREER Award from the U.S. National Science Foundation, and the Young Investigator Award from the NSF of China.

## All Welcome!

You need not be a member of IEEE to attend, and there is no charge for admission. Light refreshments will be served starting at 6:45 PM.

Time: 7:00 PM (light refreshments at 6:45 PM), Thursday, January 31, 2008.

Place: New Jersey Institute of Technology (NJIT), Weston Lecture Hall #1 (Intersection between Warren & Summit Streets), Newark, NJ. Directions are available at http://www.njit.edu/University/Directions.h tml.

**Information:** Dr. Mike Liechenstein, (973) 471-0721, (m.liechenstein "AT" ieee.org) or mengchu.zhou "AT" njit.edu. Please RSVP and check the electronic newsletter for any changes.

## NJ LEOS Chapter:

## How Light Emerges from an Illuminated Array of Sub-Wavelength Apertures

On January 31, 2008, the IEEE NJ Lasers And Electro-Optics Chapter together with the Electronic Imaging Center at NJIT will host a talk on "How Light Emerges from an Illuminated Array of Sub-Wavelength Apertures." The speaker will be Dr. Girsh Blumberg.

### About the Talk

Surface plasmons are electromagnetic surface waves that propagate at the interface between a metal and a dielectric by the collective motion of electrons. Unlike most guided modes, the electric fields associated with surface plasmon modes are evanescent, and decay exponentially with distance from the interface. When excited by an optical field in a metal film they can travel quite long distances along the metal's surfaces. They also can turn back into a freely propagating optical wave when they are scattered by periodic array of holes or grooves. Recent works on extraordinary optical transmission and light beaming in sub-wavelength periodically structured metal films suggest a direction for fabricating optical devices that operate below the diffraction limit and utilize the coherent fluctuations of surface plasmons. Significant advances in this area may be possible if surface plasmons

can be controllably converted to and from free-space photons, and if their surface propagation can be intentionally directed in two dimensions (2D). We demonstrate that surface plasmons can form coherent modes whose intensity and 2D propagation direction can be manipulated by varying the wavelength, incidence angle, and polarization of the excitation light. We also demonstrate the reverse conversion of surface plasmons back into light and observe directional beaming.

## **About the Speaker**

Girsh Blumberg received his PhD in Physics and Mathematics from Estonian Academy of Sciences in 1987. Between 1981 - 2000 he was Research/Senior Research Associate at the Institute of Chemical Physics and Biophysics, Estonian Academy of Sciences. Starting from 1992 he was Research Assistant Professor at the University of Illinois at Urbana-Champaign, and at the NSF Science and Technology Center for Superconductivity before joining Bell Labs in 1998 as the Member of Technical Staff. Girsh Blumberg is an expert in general optical spectroscopy in solids, liquids and gases, single molecule spectroscopy, and electronic phononic Raman spectroscopy, surface enhanced Raman spectroscopy and spectroscopic instrumentation. He is best known for his contribution to electronic Raman scattering studies in correlated electron systems, superconductors and quantum spin systems. He has organized numerous spectroscopy meetings and served in advisory boards of numerous national and international conferences. He is an author in over 80 publications in refereed journals and is inventor on 17 patents in the fields of nano-plasmonic applications and spectroscopy. He was Elected Fellow of the American Physical Society for "seminal contributions to elucidating the physics of spin, charge and superconducting correlations in 1D and 2D complex oxide compounds using Raman scattering techniques."

## All Welcome!

You do not have to be a member of the IEEE to attend.

**Time:** 5:00 PM, Thursday, January 31, 2008. Free pizza will be available starting at 4:45 PM.

**Place:** New Jersey Institute of Technology (NJIT), Room 202, ECE Center, Newark, NJ. Directions are available at http://www.njit.edu.

**Information:** Professor H. Grebel, (973) 596-3538, grebel "AT" njit.edu.

IEEE-USA in Action:

## Former IEEE-USA President Highlights IEEE-USA Innovation Institute at IEEE Globecom 2007

Washington (30 November 2007) - Former IEEE-USA President Ralph W. Wyndrum highlighted the IEEE-USA Innovation Institute during a panel session on entrepreneurship at IEEE Globecom 2007 on Wednesday.

Wyndrum, who served as IEEE-USA president in 2006 and is now president of the IEEE-USA Innovation Institute, told attendees that "innovation is everything from invention to the final sale."

The seven-person panel, sponsored by IEEE GOLD (Graduates of the Last Decade), was designed to help graduate students and young professionals learn about what skills and techniques are key to the successful commercialization of research ideas.

Wyndrum's presentation included information on the pilot Innovation Forum that IEEE-USA hosted in Falls Church, Va., on 6-8 November. Twenty-two people from organizations such as NASA, Lockheed Martin, Boeing, the FCC and the Office of Naval Research, participated in the event. Attendees had the opportunity to earn either 1.5 CEUs or 10 PDHs.

Wyndrum revealed that three Innovation Forums will be held around the country in 2008, six in 2009. The forums are designed to promote the innovation process, highlight new technologies and trends, and help high-tech professionals improve their innovation skills. The faculty is composed of successful technology innovators.

The IEEE-USA Innovation Institute offer programs designed to advance the preparation of leaders responsible for the innovation of new products and services by sharing the experiences of successful innovators in a coordinated program of interaction, teaching, mentoring and networking.

Other key aspects of the Innovation Institute (http://www.innovation-institute.org/) include an online community; a clearinghouse of additional resources; e-books; and eventually, a national conference.

Innovators can also benefit from the IEEE-USA Entrepreneurs Village (http://www.ieeeusa.org/careers/entrepreneurs/default.asp). Introduced in May 2006, the village provides high-tech entrepreneurs with tools and resources conducive to innovation and company growth.

Wyndrum's presentation highlighted IEEE-USA's participation in IEEE Globecom 2007 at the Washington Hilton Hotel. IEEE-USA staff was on hand to provide attendees with information on the organization's career resources and government relations activities.

IEEE Globecom 2007, held 26-30 November, was the IEEE Communications Society's 50th anniversary of its Global Communications Conference. It is annually "the premier telecommunications event for industry professionals and academics from companies, governmental agencies and universities around the world."

IEEE Globecom 2008 will be in New Orleans: http://www.comsoc.org/confs/globecom/2008/.

Contact: Chris McManes

IEEE-USA Public Relations Manager 1828 L Street N.W., Suite 1202 Washington, DC 20036-5104

(202) 530-8356

c.mcmanes@ieee.org, www.ieeeusa.org

# IEEE North Jersey Section Education Committee

- ran courses: C, C++, Java, Advanced Java and C# programming successfully since 1993
- 138 IEEE engineers and non-engineers took these courses and they gave excellent reviews
- We need a company that has a classroom with 10+ computers, to run the programming courses.
- Contact Donald Hsu, Education Committee Chair, yanyou@hotmail.com if you can help. Thanks!

## NJ Power Engineering Society/Industry Applications Society

## **Power Monitoring Solutions Seminar**

The PES and IAS Chapters will sponsor a technical seminar on the topic of power monitoring solutions. The session will be held on Friday, February 22, 2008 at a facility in North Jersey to be determined.

#### Topics

Power Monitoring Solutions

- ✓ Why Monitor?
- ✓ What to Monitor?
  - Commercial Buildings
  - Construction
  - Universities
  - Large Industrials
  - Hospitals
  - o Critical Power Systems

#### **About the Instructor**

The instructor will be Jeanne Ziobro from Square D/ Schneider Electric. Jeanne received a Bachelor of Science degree in Electrical Engineering from Lehigh University in 1991 and a Masters of Science degree in Management of Technology from Lehigh University in 2001. Jeanne has over 16 years of industry experiences including positions such as Substation Designer/ Relay Engineer at Metropolitan Edison; Relay Designer and tester, application engineer at ABB Power T&D; Protective Relay Product Line Manager at Eaton/Cutler Hammer and recently Power Management Specialist at Square D/ Schneider Electric.

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The registration fee for this seminar prior to February 8<sup>th</sup> will be \$150 for non-IEEE members, \$100 for IEEE Members, \$75 for GOLD Graduates (last 1-10 years) and \$25 for students with valid ID. The fee will be waived for IEEE Life Member Grades with verification at the seminar. Registrations after February 8<sup>th</sup> must include an additional late fee of \$25. The seminar fee includes lunch, refreshments and handouts. Non-members joining IEEE within 30 days of the seminar will be rebated 50% of the IEEE registration charge.

If desired, IEEE Continuing Education Units will be offered for this course - a small fee of \$25 will be required for processing. A total of 0.4 CEUs will be offered. Please indicate if desired below.

Time: 9:00 AM to 2:00 PM (lunch is included), Friday, February 22, 2008.

Place: Facility in North Jersey to be determined

**Directions:** 

Information: Ronald W. Quade, PE, (732) 205-2614 or rwquade "AT" ieee.org

Registration: Power Monitoring Solutions Seminar 2/22/2008

Register via US mail to: Ronald W. Quade, PE

Eaton Electrical

379 Thornall St, 8<sup>th</sup> Floor Edison, NJ 08837

Name			
Address			
Phone			
		Non IEEE	Life Member
Continuing Education Units:			
If CEUs are chosen, please inc			
Payment Enclosed \$	Add \$25 late	registration after February 8, 2	2008

Make checks payable to North Jersey Section IEEE (Credit Cards cannot be processed at this time).

## IEEE North Jersey Section Course Project Management

Tuesday Evening, March 11, 2008 through May 6, 2008
Eight weekly classes (March 11, 25, April 1, 8, 15, 22, 29, May 6, 2008
USPS, NJ International Bulk Mail Center, 80 County Road, Jersey City, NJ 07097
(Checks should not be mailed to this address)

## IEEE North Jersey Section thanks USPS, NJIBMC for sponsoring this course at its site

The North Jersey Section IEEE is offering an evening course entitled "Project Management". Dice.com lists 5500+ Project related jobs in the New York tri-state area daily! This course will help you to break down a master project into manageable tasks, pinpoint possible solutions, and provide information to keep the project under control. Using Microsoft Project software, you will learn to accomplish various project plans. In addition, it will greatly enhance your business, communications and interpersonal skills.

You will receive the IEEE certificate of completion when you finish the course. You may wish to take two Certification exams, one in *Project Management* administered by Project Management Institute and the other in *IT Project*+ by CompTIA Inc from the knowledge you learned in this course. (This is *not an exclusive PMP-PMI examination prep course*. No PDUs are issued for PMP eligibility. CEU credits would be given by IEEE)

Instructor: **Donald Hsu, Ph.D.**, has been a corporate manager for 11 years and is an experienced trainer. Since 2000, he has trained 650 people in *IT Project+*, *MS Project 2007, Project Management and Global E-Commerce courses* in eight organizations.

## **TOPICS**

- 1. Explain the need for a project manager in different industries
- 2. Define SOW, PERT, GANTT, CPM, and Scope of the project
- 3. Identify the team members, resources and plan for the strategy
- 4. Calculate schedule, budget variances, and monitor project progress
- 5. Manage changes, estimates, and communications
- 6. Employ the use of MS Project 2007, MS Visio 2007 and related software
- 7. Set a baseline, import tasks from MS Excel, export Project files to MS Word
- 8. Create and modify custom reports, templates and combination views
- 9. Approve updates and conclude a project plan
- 10. Market global E-commerce projects
- 11. Present final projects from the participants

will be emailed to you for confirmation.

☐ I wish to receive the IEEE Completion Certificate

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